## REMARKS

This Application has been carefully reviewed in light of the Office Action mailed October 7, 2003. Claims 1-32 are pending in the Application. In response to an election/restriction requirement from the Examiner, Applicants provisionally elected to prosecute Claims 1-10 and 19-29. Claims 11-18 and 30-32 are withdrawn without prejudice or disclaimer. The Examiner rejected Claims 1-10 and 19-29. Claims 1 and 19 have been amended to incorporate the limitations of Claims 2 and 20, which have been cancelled.

As described below, Applicants believe all claims to be allowable over the cited references. Therefore, Applicants respectfully request reconsideration and full allowance of all pending claims.

### Election of Claims

Applicants affirm the election of Claims 1-10 and 19-29, as discussed previously during a telephone conversation with the Examiner on September 11, 2003. In light of this election, Applicants withdraw Claims 11-18 and 30-32, without prejudice or disclaimer.

### Section 102 Rejections

The Examiner rejects Claims 1 and 19 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,353,593 issued to Chen et al. ("*Chen*").

*Chen* discloses a system and method for protecting virtual channel connections between a source node and a destination node in a telecommunications system. (*Chen*, Abstract). A protection switching status is received for working and protection transmission links. (*Chen*, Col. 2; Lines 11-13). Virtual channel connections are bundled together to form a virtual path connection and are protection switched in the event of a line failure. (*Chen*, Col. 2; Lines 1-3). An alarm indication signal is received at the destination node indicating that a transmission line has failed. (*Chen*, Col. 4; Lines 45-49). In the event of an alarm, a virtual path selector selects a virtual path connection associated with a protection transmission link and protection switches all the virtual channel connections associated with the virtual path connection. (*Chen*, Col. 4; Lines 49-66).

**Amended Claims 1 and 19 are Allowable Over *Chen***

Claim 1, as amended, recites the following:

> A method for providing protection for connectionless signals in a telecommunications network comprising a plurality of nodes, the method comprising:
> generating a first protection path from each of the nodes to a destination node;
> generating a second protection path from each of the nodes to the destination node, the second protection path distinct from the first protection path; and
> routing protection traffic along one of the protection paths to the destination node;
> wherein generating the first protection path and generating the second protection path each comprise decomposing the telecommunications network.

Claim 19, as amended, recites similar, although not identical, limitations.

Claim 1, as amended, incorporates the limitations of cancelled Claim 2. In particular, Claim 1, as amended, recites "generating a first and a second protection paths wherein generating the first protection path and generating the second protection path each comprise decomposing the telecommunications network." Claim 19, as amended, incorporates the limitations of cancelled Claim 20. In particular, amended Claim 19 recites, in part, "a plurality of nodes operable to receive and transmit connectionless signals and be decomposed into a ring."

The Examiner rejected Claims 2 and 20 under 35 U.S.C. §103(a) stating that *Chen* in view of U.S. Patent No. 6,222,653 issued to Asahi ("*Asahi*") disclosed the limitations of Claims 2 and 20. The Examiner noted that *Chen* fails to disclose decomposing a telecommunications network, but that *Asahi* discloses this limitation. (Office Action mailed 10/7/03, page 7, ¶12, citing *Chen*, Col. 6; Lines 14-16). *Asahi* merely discloses an optical network wherein each node has a first stand-by communication path having an input terminal and second stand-by communication path having an output terminal. (*Asahi*, Abstract, Col. 6; Lines 14-16). However, *Asahi* fails to disclose that generating the first protection path and generating the second protection path each comprise *decomposing* the telecommunications network, as recited in amended Claim 1, or that a plurality of nodes is operable to receive and transmit connectionless signals and *be decomposed into a ring*, as recited in amended Claim 19. By way

of example and without limitation, Applicants direct the Examiner's attention to the discussion of network decomposition in the present application with reference to FIGURES 2 and 3 on pages 9-12 of the "Detailed Description of the Invention."

For at least this reason, Claims 1 and 19, as amended, are allowable over *Chen* and *Asahi*. Therefore, Applicants respectfully request reconsideration and allowance of amended Claims 1 and 19, as well as all claims that depend from those claims.

**Section 103 Rejections**

The Examiner rejects Claims 2-7 and 20-21 under 35 U.S.C. § 103(a) as being unpatentable over *Chen* in view of U.S. Patent No. 6,222,653 issued to Asahi ("*Asahi*"). As discussed above, Claims 2 and 20 have been cancelled and their limitations have been incorporated into amended Claims 1 and 19, which have been shown above to be allowable over *Chen* and *Asahi*. Furthermore, the Examiner rejects Claims 8, 9, and 22-29 under 35 U.S.C. § 103(a) as being unpatentable over *Chen* in view of U.S. Patent No. 6,122,249 issued to Mochizuki et al. ("*Mochizuki*").

**Claims 3-7 and 21 are Allowable Over *Chen* and *Asahi***

Dependent Claims 3-7 and 21 depend from, and incorporate all of the limitations of, independent Claims 1 and 19, respectively, which have been shown to be allowable for the reasons discussed above. Therefore, dependent Claims 3-7 and 21 are allowable as they depend from allowable base claims. In addition to their dependence on allowable base claims, dependent Claims 3-7 and 21 are allowable because they each contain limitations not disclosed in *Chen* and *Asahi,* either alone or in combination.

For example, Claim 3 recites decomposing the telecommunications network into a ring. The Examiner states that *Asahi* discloses this limitation. (Office Action mailed 10/7/03, page 8, ¶13, citing *Chen*, Col. 6; Lines 14-16). As discussed above with respect to Claims 1 and 19, *Asahi* fails to disclose *decomposing* a telecommunications network, let alone decomposing the telecommunications network *into a ring*, as recited in Claim 3.

For at least this additional reason, Claim 3, is allowable over *Chen* and *Asahi*. Therefore, Applicants respectfully request reconsideration and allowance of Claim 3, as well as all Claims 4-7, which depend from Claim 3.

In addition, Claim 4 recites decomposing the telecommunications network into at least one ear. Claim 21 recites similar, although not identical, limitations. The Examiner states that *Asahi* discloses this limitation. (Office Action mailed 10/7/03, page 8, ¶13-14, citing *Chen*, Col. 6; Lines 14-16). As discussed above with respect to Claims 1 and 19, *Asahi* fails to disclose *decomposing* a telecommunications network, let alone decomposing the telecommunications network *into at least one ear,* as recited in Claim 4, and similarly, although not identically, in Claim 21.

For at least this additional reason, Claims 4 and 21 are allowable over *Chen* and *Asahi*. Therefore, Applicants respectfully request reconsideration and allowance of Claims 4 and 21, as well as Claims 5-7, which depend from Claim 4.

Furthermore, Claim 5 recites "charting the ring horizontally beginning with the destination node and ending with the destination node." Claim 6 recites "ordering the ears and charting the ears horizontally based on the order of the ears." The Examiner states that *Asahi* discloses these limitations. (Office Action mailed 10/7/03, page 8, ¶15, citing *Chen*, Col. 6; Lines 14-16). *Asahi* merely discloses an optical network wherein each node has a first stand-by communication path having an input terminal and second stand-by communication path having an output terminal. (*Asahi*, Abstract, Col. 6; Lines 14-16). However, *Asahi* fails to disclose charting the ring horizontally beginning with the destination node and ending with the destination node, as recited in Claim 5, or ordering the ears and charting the ears horizontally based on the order of the ears, as recited in Claim 6.

For at least this additional reason, Claims 5 and 6 are allowable over *Chen* and *Asahi*. Therefore, Applicants respectfully request reconsideration and allowance of Claims 5 and 6, as well as Claim 7, which depends from Claim 6.

Moreover, Claim 7 recites "generating the first protection path in a first direction based on the charted ring and ears" and "generating the second protection path in a second direction based on the charted ring and ears." The Examiner states that *Asahi* discloses these limitations. (Office Action mailed 10/7/03, page 8, ¶16, citing *Chen*, Col. 6; Lines 14-16). Col. 6; Lines 14-16). However, as discussed above with respect to Claims 5 and 6, *Asahi* fails to disclose charting the ring and ears.

For at least this additional reason, Claim 7 is allowable over *Chen* and *Asahi*. Therefore, Applicants respectfully request reconsideration and allowance of Claim 7.

**Claims 8-10 and 22-29 are Allowable Over *Chen* and *Mochizuki***

Dependent Claims 8-10 and 22-29 depend from, and incorporate all of the limitations of, independent Claims 1 and 19, respectively, which have been shown to be allowable for the reasons discussed above. Therefore, dependent Claims 8-10 and 22-29 are allowable as they depend from allowable base claims. In addition to their dependence on allowable base claims, dependent Claims 8-10 and 22-29 are allowable because they each contain limitations not disclosed in *Chen* and *Mochizuki,* either alone or in combination.

In the Office Action Summary for the Office Action mailed on October 7, 2003, the Examiner indicated that Claims 1-10 and 19-29 have been rejected. However, in discussing the reasons for rejecting the claims, the Examiner has not discussed any grounds for rejecting Claim 10. Applicants respectfully request that the Examiner indicate the status of Claim 10, and, if Claim 10 is rejected, to provide a citation to a reference which the Examiner alleges discloses the limitations of Claim 10. However, for at least the reasons discussed above with respect to Claim 1 and the reasons discussed below with respect to Claims 8-9, Applicants believe that Claim 10 is allowable over *Chen*, *Asahi*, and *Mochizuki*, whether considered alone or in combination.

Claim 8 recites classifying traffic as working traffic or protection traffic and routing protection traffic based on the classification of the received traffic as working traffic or protection traffic. Claim 28 recites similar, although not identical, limitations. The Examiner states that *Chen* is silent as to these limitations, but that *Mochizuki* discloses these limitations.

(Office Action mailed 10/7/03, page 8-9, ¶17 citing *Mochizuki,* Col. 1; Lines 45-50). *Mochizuki* merely discloses setting a signal path based on path data. (*Mochizuki*, Col. 1; Lines 45-47). However, *Mochizuki* fails to disclose *classifying* received traffic as working traffic or protection traffic, as recited in Claim 8, and similarly, although not identically, in Claim 28.

For at least this additional reason, Claims 8 and 28 are allowable over *Chen* and *Mochizuki*. Therefore, Applicants respectfully request reconsideration and allowance of Claim 8 and Claim 28, as well as Claims 9-10 and 29, which depend from Claims 8 and 28, respectively.

Claim 22 recites, in part, "a protection egress port identifier operable to identify one of the ports as a protection egress port for a specified ingress port and a specified destination node." The Examiner states that *Mochizuki* discloses this limitation. (Office Action mailed 10/7/03, page 9, ¶18 citing *Mochizuki,* Col. 1; Lines 48-67). *Mochizuki* merely discloses setting a signal path based on path data and dropping/inserting signals onto a path using dropping path protection switches and inserting path protection switches. (*Mochizuki*, Col. 1; Lines 45-47, 54-65). However, *Mochizuki* fails to disclose *a protection egress port identifier* operable to identify one of the ports as a protection egress port for a specified ingress port and a specified destination node, as recited in Claim 22.

For at least this additional reason, Claim 22 is allowable over *Chen* and *Mochizuki*. Therefore, Applicants respectfully request reconsideration and allowance of Claim 22, as well as Claims 23-29, which depend from Claim 22.

Claim 23 recites an egress port evaluator operable to evaluate a status for each of the ports. The Examiner states that *Mochizuki* discloses this limitation. (Office Action mailed 10/7/03, page 9, ¶18 citing *Mochizuki,* Col. 1; Lines 48-67). *Mochizuki* merely discloses setting a signal path based on path data and dropping/inserting signals onto a path using dropping path protection switches and inserting path protection switches. (*Mochizuki*, Col. 1; Lines 45-47, 54-65). However, *Mochizuki* fails to disclose *evaluating a status* for each port, let alone an *egress port evaluator* operable to evaluate a status for each of the ports, as recited in Claim 23.

For at least this additional reason, Claim 23 is allowable over *Chen* and *Mochizuki*. Therefore, Applicants respectfully request reconsideration and allowance of Claim 23, as well as Claims 24-29, which depend from Claim 23.

Claim 24 recites an egress port selector operable to select an egress port for transmitting traffic for the node. The Examiner states that *Mochizuki* discloses this limitation. (Office Action mailed 10/7/03, page 9, ¶19 citing *Mochizuki,* Col. 1; Lines 48-67). *Mochizuki* merely discloses setting a signal path based on path data and dropping/inserting signals onto a path using dropping path protection switches and inserting path protection switches. (*Mochizuki*, Col. 1; Lines 45-47, 54-65). However, *Mochizuki* fails to disclose *an egress port selector*, as recited in Claim 24.

For at least this additional reason, Claim 24 is allowable over *Chen* and *Mochizuki*. Therefore, Applicants respectfully request reconsideration and allowance of Claim 24, as well as Claims 25-29, which depend from Claim 24.

Claim 25 recites that the egress port selector is further operable to discard protection traffic received at the specified ingress port for the specified destination node when a status for the protection egress port comprises unavailable. The Examiner states that *Mochizuki* discloses this limitation. (Office Action mailed 10/7/03, page 9, ¶19 citing *Mochizuki,* Col. 1; Lines 48-67). *Mochizuki* merely discloses setting a signal path based on path data and dropping/inserting signals onto a path using dropping path protection switches and inserting path protection switches. (*Mochizuki*, Col. 1; Lines 45-47, 54-65). However, *Mochizuki* fails to disclose a *status for a protection egress port*, let alone the ability to *discard protection traffic* received at the specified ingress port for the specified destination node when a status for the protection egress port comprises unavailable

For at least this additional reason, Claim 25 is allowable over *Chen* and *Mochizuki*. Therefore, Applicants respectfully request reconsideration and allowance of Claim 25.

Claim 26 recites a working traffic egress port identifier operable to identify one of the ports as a working traffic egress port for a specified ingress port and a specified destination node.

The Examiner states that *Mochizuki* discloses this limitation. (Office Action mailed 10/7/03, page 10, ¶20 citing *Mochizuki,* Col. 1; Lines 48-67; Col. 2; Lines 21-25). *Mochizuki* merely discloses setting a signal path based on path data and dropping/inserting signals onto a path using dropping path protection switches and inserting path protection switches. (*Mochizuki*, Col. 1; Lines 45-47, 54-65). Furthermore, *Mochizuki* discloses path setting units that set a path for a signal according to path data and a controller for controlling a signal selector according to an alarm. (*Mochizuki*, Col. 2; Lines 19-27). However, *Mochizuki* fails to disclose a *working traffic egress port identifier*, as recited in Claim 26.

For at least this additional reason, Claim 26 is allowable over *Chen* and *Mochizuki*. Therefore, Applicants respectfully request reconsideration and allowance of Claim 26, as well as Claims 27-29, which depend from Claim 26.

Claim 27 recites a secondary protection egress port identifier operable to identify one of the ports as a secondary protection egress port for a specified destination node. The Examiner states that *Mochizuki* discloses this limitation. (Office Action mailed 10/7/03, page 10, ¶20 citing *Mochizuki,* Col. 1; Lines 48-67; Col. 2; Lines 21-25). *Mochizuki* merely discloses setting a signal path based on path data and dropping/inserting signals onto a path using dropping path protection switches and inserting path protection switches. (*Mochizuki*, Col. 1; Lines 45-47, 54-65). Furthermore, *Mochizuki* discloses path setting units that set a path for a signal according to path data and a controller for controlling a signal selector according to an alarm. (*Mochizuki*, Col. 2; Lines 19-27). However, *Mochizuki* fails to disclose a *secondary protection egress port identifier*, as recited in Claim 26.

For at least this additional reason, Claim 27 is allowable over *Chen* and *Mochizuki*. Therefore, Applicants respectfully request reconsideration and allowance of Claim 27, as well as Claims 28-29, which depend from Claim 27.

Claim 29 recites that the egress port selector is operable to select an egress port for transmitting traffic for the node based on the classification of the received traffic as working traffic or protection traffic and based on the status for the egress ports. The Examiner states that

*Mochizuki* discloses this limitation. (Office Action mailed 10/7/03, page 8-9, ¶17 citing *Mochizuki,* Col. 1; Lines 45-50). *Mochizuki* merely discloses setting a signal path based on path data. (*Mochizuki*, Col. 1; Lines 45-47). However, *Mochizuki* fails to disclose a *status* of the egress ports.

For at least this additional reason, Claim 29 is allowable over *Chen* and *Mochizuki*. Therefore, Applicants respectfully request reconsideration and allowance of Claim 29

## CONCLUSION

Applicants have made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicants respectfully requests full allowance of all pending claims.

If the Examiner feels that a telephone conference would advance prosecution of this Application in any manner, the Examiner is invited to contact Brian W. Oaks, Attorney for Applicants, at the Examiner's convenience at (214) 953-6986.

Although no fees are believed to be due, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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